

CLAIMS:

1. An isolated specific binding member for human IL-13,  
comprising an antibody antigen-binding site which is composed  
5 of a human antibody VH domain and a human antibody VL domain  
and which comprises a set of CDR's HCDR1, HCDR2, HCDR3, LCDR1,  
LCDR2 and LCDR3, wherein the VH domain comprises HCDR 1, HCDR2  
and HCDR3 and the VL domain comprises LCDR1, LCDR2 and LCDR3,  
wherein the set of CDR's consists of a set of CDR's selected  
10 from the group consisting of:

the BAK278D6 set of CDR's, defined wherein the HCDR1 has  
the amino acid sequence of SEQ ID NO: 1, the HCDR2 has the  
amino acid sequence of SEQ ID NO: 2, the HCDR3 has the amino  
acid sequence of SEQ ID NO: 3, the LCDR1 has the amino acid  
15 sequence of SEQ ID NO: 4, the LCDR2 has the amino acid  
sequence of SEQ ID NO: 5, and the LCDR3 has the amino acid  
sequence of SEQ ID NO: 6,

a set of CDR's which contains one or two amino acid  
substitutions compared with the BAK278D6 set of CDR's, and  
20 each set of CDR's as shown for individual clones in Table  
1.

2. An isolated specific binding member according to claim 1  
wherein the one or two substitutions are at one or two of the  
25 following residues within the CDRs, using the standard  
numbering of Kabat.

31, 32, 34 in HCDR1

30 52, 52A, 53, 54, 56, 58, 60, 61, 62, 64, 65 in HCDR2

96, 97, 98, 99, 101 in HCDR3

26, 27, 28, 30, 31 in LCDR1

56 in LCDR2

5

95A, 97 in LCDR3

3. An isolated specific binding member according to claim 2  
 wherein the one or two substitutions are made at the following  
 10 positions from among the identified groups of possible  
 substitute residues for each position:

<u>Position of</u> <u>substitution</u>	<u>Substitute Residue</u> <u>selected from the group</u> <u>consisting of</u>
15	
31 in HCDR1:	Q, D, L, G and E
32 in HCDR1:	T
34 in HCDR1:	V, I and F
20	
52 in HCDR2:	D, N, A, R, G and E
52A in HCDR2:	D, G, T, P, N and Y
53 in HCDR2:	D, L, A, P, T, S, I and R
25 54 in HCDR2:	S, T, D, G, K and I
56 in HCDR2:	T, E, Q, L, Y, N, V, A, M and G
58 in HCDR2:	I, L, Q, S, M, H, D and K
60 in HCDR2:	R
61 in HCDR2:	R
30 62 in HCDR2:	K and G
64 in HCDR2:	R
65 in HCDR2:	K

- 96 in HCDR3: R and D  
97 in HCDR3: N, D, T and P  
98 in HCDR3: R  
5 99 in HCDR3: S, A, I, R, P and K  
101 in HCDR3: Y
- 26 in LCDR1: D and S  
27 in LCDR1: I, L, M, C, V, K, Y, F, R, T, S, A, H and G  
10 28 in LCDR1: V  
30 in LCDR1: G  
31 in LCDR1: R
- 56 in LCDR2: T  
15
- 95A in LCDR3: N  
97 in LCDR3: I.
4. An isolated specific binding member according to claim 3  
20 wherein there are two substitutions compared with the BAK278D6  
set of CDR's, at HCDR3 residue 99 and LCDR1 residue 27.
5. An isolated specific binding member according to claim 4  
comprising the BAK278D6 set of CDR's with a substitution at  
25 HCDR3 residue 99 selected from the group consisting of S, A,  
I, R, P and K, and/or a substitution at LCDR1 residue 27  
selected from the group consisting of I, L, M, C, V, K, Y, F,  
R, T, S, A, H and G.
- 30 6. An isolated specific binding member according to claim 4  
comprising the BAK278D6 set of CDR's with S substituted for N

at HCDR3 residue 99 and/or I substituted for N at LCDR 1 residue 27.

7. An isolated specific binding member according to any one  
5 of claims 1 to 6 wherein HCDR1, HCDR2 and HCDR3 of the VH domain are within a germ-line framework and/or LCDR1, LCDR2 and LCDR3 of the VL domain are within a germ-line framework.
8. An isolated specific binding member according to claim 7  
10 wherein the HCDR1, HCDR2 and HCDR3 of the VH domain are within germ-line framework VH1 DP14.
9. An isolated specific binding member according to claim 7 or claim 8 wherein the HCDR1, HCDR2 and HCDR3 of the VH domain  
15 are within germ-line framework VL Vλ3 3h.
10. An isolated specific binding member according to any one of claims 1 to 9 which binds a human IL-13 variant in which arginine at position 130 is replaced by glutamine.  
20
11. An isolated specific binding member according to any one of claims 1 to 10 which binds non-human primate IL-13.
12. An isolated specific binding member according to claim 11  
25 wherein the non-human primate IL-13 is rhesus or cynomolgus.
13. A specific binding member according to any one of claims 8 to 12 comprising the BAK502G9 VH domain (SEQ ID NO: 15).
- 30 14. A specific binding member according to any one of claims 8 to 13 comprising the BAK502G9 VL domain (SEQ ID NO: 16).

15. A specific binding member according to any one of claims  
1 to 14 that binds IL-13 with affinity equal to or better than  
the affinity of an IL-13 antigen-binding site formed by the  
BAK502G9 VH domain (SEQ ID NO: 15) and the BAK502G9 VL domain  
5 (SEQ ID NO: 16), the affinity of the specific binding member  
and the affinity of the antigen-binding site being as  
determined under the same conditions.
16. A specific binding member according to any one of claims  
10 1 to 15 that neutralizes human IL-13.
17. A specific binding member according to claim 16 that  
neutralizes human IL-13, with a potency equal to or better  
than the potency of a IL-13 antigen-binding site formed by the  
15 BAK502G9 VH domain (SEQ ID NO: 15) and the BAK502G9 VL domain  
(SEQ ID NO: 16), the potency of the specific binding member  
and the potency of the antigen-binding site being as  
determined under the same conditions.
- 20 18. A specific binding member according to any one of claims  
1 to 17 that comprises an scFv antibody molecule.
19. A specific binding member according to any one of claims  
1 to 17 that comprises an antibody constant region.  
25
20. A specific binding member according to claim 19 that  
comprises a whole antibody.
21. A specific binding member according to claim 20 wherein  
30 the whole antibody is IgG4.

22. An isolated antibody VH domain of a specific binding member according to any one of claims 1 to 21.

23. An isolated antibody VL domain of a specific binding member according to any one of claims 1 to 21.

24. A composition comprising a specific binding member, antibody VH domain or antibody VL according to any one of claims 1 to 23 and at least one additional component.

25. A composition according to claim 24 comprising a pharmaceutically acceptable excipient, vehicle or carrier.

26. An isolated nucleic acid which comprises a nucleotide sequence encoding a specific binding member or antibody VH or VL domain of a specific binding member according to any one of claims 1 to 23.

27. A host cell *in vitro* transformed with nucleic acid according to claim 26.

28. A method of producing a specific binding member or antibody VH or VL domain, the method comprising culturing host cells according to claim 27 under conditions for production of said specific binding member or antibody VH or VL domain.

29. A method according to claim 28 further comprising isolating and/or purifying said specific binding member or antibody VH or VL variable domain.

30. A method according to claim 28 or claim 29 further comprising formulating the specific binding member or antibody

VH or VL variable domain into a composition including at least one additional component.

31. A method for producing an antibody antigen-binding domain  
5 specific for human IL-13, the method comprising  
providing, by way of addition, deletion, substitution or  
insertion of one or more amino acids in the amino acid  
sequence of a parent VH domain comprising HCDR 1, HCDR2 and  
HCDR3, wherein the parent VH domain HCDR1, HCDR2 and HCDR3 are  
10 the BAK278D6 set of HCDR's, defined wherein the HCDR1 has the  
amino acid sequence of SEQ ID NO: 1, the HCDR2 has the amino  
acid sequence of SEQ ID NO: 2, the HCDR3 has the amino acid  
sequence of SEQ ID NO: 3, or the BAK502G9 set of HCDR's,  
defined wherein the HCDR1 has the amino acid sequence of SEQ  
15 ID NO: 7, the HCDR2 has the amino acid sequence of SEQ ID NO:  
8, the HCDR3 has the amino acid sequence of SEQ ID NO: 9, a VH  
domain which is an amino acid sequence variant of the parent  
VH domain, and optionally combining the VH domain thus  
provided with one or more VL domains to provide one or more  
20 VH/VL combinations; and  
testing said VH domain which is an amino acid sequence  
variant of the parent VH domain or the VH/VL combination or  
combinations to identify an antibody antigen binding domain  
specific for human IL-13.

25

32. A method according to claim 31 wherein the parent VH  
domain amino acid sequence is selected from the group  
consisting of SEQ ID NO: 13 and SEQ ID NO: 15.

30 33. A method according to claim 31 or claim 32 wherein said  
one or more VL domains is provided by way of addition,  
deletion, substitution or insertion of one or more amino acids

in the amino acid sequence of a parent VL domain comprising LCDR 1, LCDR2 and LCDR3, wherein the parent VL domain LCDR1, LCDR2 and LCDR3 are the BAK278D6 set of LCDR's, defined wherein the LCDR1 has the amino acid sequence of SEQ ID NO: 4,  
5 the LCDR2 has the amino acid sequence of SEQ ID NO: 5, the LCDR3 has the amino acid sequence of SEQ ID NO: 6, or the BAK502G9 set of LCDR's, defined wherein the LCDR1 has the amino acid sequence of SEQ ID NO: 10, the LCDR2 has the amino acid sequence of SEQ ID NO: 11, the LCDR3 has the amino acid  
10 sequence of SEQ ID NO: 12, producing one or more VL domains each of which is an amino acid sequence variant of the parent VL domain.

34. A method according to claim 33 wherein the parent VL  
15 domain amino acid sequence is selected from the group consisting of SEQ ID NO: 14 and SEQ ID NO: 16.

35. A method for producing an antibody antigen-binding domain specific for human IL-13, the method comprising  
20 providing, by way of addition, deletion, substitution or insertion of one or more amino acids in the amino acid sequence of a parent VH domain comprising HCDR 1, HCDR2 and HCDR3, wherein the parent VH domain HCDR1, HCDR2 and HCDR3 are the BAK167A11 set of HCDR's, defined wherein the HCDR1 has the  
25 amino acid sequence of SEQ ID NO: 55, the HCDR2 has the amino acid sequence of SEQ ID NO: 56, the HCDR3 has the amino acid sequence of SEQ ID NO: 57, the BAK615E3 set of HCDR's, defined wherein the HCDR1 has the amino acid sequence of SEQ ID NO: 153, the HCDR2 has the amino acid sequence of SEQ ID NO: 154,  
30 the HCDR3 has the amino acid sequence of SEQ ID NO: 155, the BAK582F7 set of HCDR's, defined wherein the HCDR1 has the amino acid sequence of SEQ ID NO: 141, the HCDR2 has the amino



acid sequence of SEQ ID NO: 142, the HCDR3 has the amino acid sequence of SEQ ID NO: 143, or the BAK612B5 set of HCDR's, defined wherein the HCDR1 has the amino acid sequence of SEQ ID NO: 147, the HCDR2 has the amino acid sequence of SEQ ID NO: 148, the HCDR3 has the amino acid sequence of SEQ ID NO: 149, a VH domain which is an amino acid sequence variant of the parent VH domain, and optionally combining the VH domain thus provided with one or more VL domains to provide one or more VH/VL combinations; and

testing said VH domain which is an amino acid sequence variant of the parent VH domain or the VH/VL combination or combinations to identify an antibody antigen binding domain specific for human IL-13.

36. A method according to claim 35 wherein the parent VH domain amino acid sequence is selected from the group consisting of SEQ ID NO: 55 and SEQ ID NO: 33.

37. A method according to claim 35 or claim 36 wherein said one or more VL domains is provided by way of addition, deletion, substitution or insertion of one or more amino acids in the amino acid sequence of a parent VL domain comprising LCDR 1, LCDR2 and LCDR3, wherein the parent VL domain LCDR1, LCDR2 and LCDR3 are the BAK167A11 set of LCDR's, defined wherein the LCDR1 has the amino acid sequence of SEQ ID NO: 58, the LCDR2 has the amino acid sequence of SEQ ID NO: 59, the LCDR3 has the amino acid sequence of SEQ ID NO: 60, the BAK615E3 set of LCDR's, defined wherein the LCDR1 has the amino acid sequence of SEQ ID NO: 156, the LCDR2 has the amino acid sequence of SEQ ID NO: 157, the LCDR3 has the amino acid sequence of SEQ ID NO: 158, the BAK582F7 set of LCDR's, defined wherein the LCDR1 has the amino acid sequence of SEQ

ID NO: 144, the LCDR2 has the amino acid sequence of SEQ ID NO: 145, the LCDR3 has the amino acid sequence of SEQ ID NO: 146, or the BAK612B5 set of LCDR's, defined wherein the LCDR1 has the amino acid sequence of SEQ ID NO: 150, the LCDR2 has the amino acid sequence of SEQ ID NO: 151, the LCDR3 has the amino acid sequence of SEQ ID NO: 152, producing one or more VL domains each of which is an amino acid sequence variant of the parent VL domain.

10 38. A method according to claim 37 wherein the parent VL domain amino acid sequence is selected from the group consisting of SEQ ID NO: 24 and SEQ ID NO: 34.

39. A method according to any one of claims 31 to 34 wherein said VH domain which is an amino acid sequence variant of the parent VH domain is provided by CDR mutagenesis.

40. A method according to any one of claims 35 to 38 wherein said VH domain which is an amino acid sequence variant of the parent VH domain is provided by CDR mutagenesis.

41. A method according to any one of claims 31 to 40 further comprising providing the antibody antigen binding site within an IgG, scFv or Fab antibody molecule.

25

42. A method of producing a specific binding member that binds human IL-13, which method comprises:

providing starting nucleic acid encoding a VH domain or a starting repertoire of nucleic acids each encoding a VH

30 domain, wherein the VH domain or VH domains either comprise a HCDR1, HCDR2 and/or HCDR3 to be replaced or lack a HCDR1, HCDR2 and/or HCDR3 encoding region;

combining said starting nucleic acid or starting repertoire with donor nucleic acid or donor nucleic acids encoding or produced by mutation of the amino acid sequence of the HCDR1 (SEQ ID NO: 1) or HCDR1 (SEQ ID NO: 7), HCDR2 (SEQ ID NO: 2) or HCDR2 (SEQ ID NO: 8) and/or HCDR3 (SEQ ID NO: 3) or HCDR3 (SEQ ID NO: 9) such that said donor nucleic acid is or donor nucleic acids are inserted into the CDR1, CDR2 and/or CDR3 region in the starting nucleic acid or starting repertoire, so as to provide a product repertoire of nucleic acids encoding VH domains;

expressing the nucleic acids of said product repertoire to produce product VH domains;

optionally combining said product VH domains with one or more VL domains;

selecting a specific binding member specific for human IL-13, which specific binding member comprises a product VH domain and optionally a VL domain; and recovering said specific binding member or nucleic acid encoding it.

43. A method according to claim 42 wherein the donor nucleic acids are produced by mutation of said HCDR1 and/or HCDR2.

44. A method according to claim 42 wherein the donor nucleic acid is produced by mutation of HCDR3.

45. A method according to claim 44 comprising providing the donor nucleic acid by mutation of nucleic acid encoding the amino acid sequence of HCDR3 (SEQ ID NO: 3) or HCDR3 (SEQ ID NO: 9).

46. A method according to claim 42 comprising providing the donor nucleic acid by random mutation of nucleic acid.

47. A method according to any one of claims 42 to 46 further comprising attaching a product VH domain that is comprised within the recovered specific binding member to an antibody constant region.

48. A method according to any one of claims 42 to 46 comprising providing an IgG, scFv or Fab antibody molecule comprising the product VH domain and a VL domain.

49. A method according to any one of claims 31 to 48, further comprising testing the antibody antigen-binding domain or specific binding member that binds human IL-13 for ability to neutralize human IL-13.

50. A method according to claim 49 wherein a specific binding member that comprises an antibody fragment that binds and neutralizes human IL-13 is obtained.

51. A method according to claim 50 wherein the antibody fragment is an scFv antibody molecule.

52. A method according to claim 50 wherein the antibody fragment is an Fab antibody molecule.

53. A method according to claim 51 or claim 52 further comprising providing the VH domain and/or the VL domain of the antibody fragment in a whole antibody.

54. A method according to any one of claims 31 to 53 further comprising formulating the specific binding member that binds IL-13, antibody antigen-binding site or an antibody VH or VL variable domain of the specific binding member or antibody  
5 antigen-binding site that binds IL-13, into a composition including at least one additional component.
55. A method according to any one of claims 31 to 54 further comprising binding a specific binding member that binds human  
10 IL-13 to IL-13 or a fragment of IL-13.
56. A method comprising binding a specific binding member that binds IL-13 according to any one of claims 1 to 21 to human IL-13 or a fragment of human IL-13.  
15
57. A method according to claim 55 or claim 56 wherein said binding takes place *in vitro*.
58. A method according to any one of claims 55 to 57  
20 comprising determining the amount of binding of specific binding member to IL-13 or a fragment of IL-13.
59. A method according to any one of claims 31 to 58 further comprising use of the specific binding member in the  
25 manufacture of a medicament for treatment of a disease or disorder selected from the group consisting of asthma, atopic dermatitis, allergic rhinitis, fibrosis, inflammatory bowel disease and Hodgkin's lymphoma.
- 30 60. Use of a specific binding member according to any one of claims 1 to 21 in the manufacture of a medicament for treatment of a disease or disorder selected from the group

consisting of asthma, atopic dermatitis, allergic rhinitis, fibrosis, inflammatory bowel disease and Hodgkin's lymphoma.

61. A method of treatment of a disease or disorder selected  
5 from the group consisting of asthma, atopic dermatitis, allergic rhinitis, fibrosis and Hodgkin's lymphoma, the method comprising administering a specific binding member according to any one of claims 1 to 21 to a patient with the disease or disorder or at risk of developing the disease or disorder.

10

62. An isolated specific binding member for human IL-13, comprising an antibody antigen-binding domain site which is composed of a human antibody VH domain and a human antibody VL domain and which comprises a set of CDR's, HCDR1, HCDR2,  
15 HCDR3, LCDR1, LCDR2 and LCDR3, wherein the VH domain comprises HCDR1, HCDR2 and HCDR3 and the VL domain comprises LCDR1, LCDR2 and LCDR3, wherein

HCDR1 is of amino acid sequence which has the formula

20 
$$HX_1 HX_2 G HX_3 S$$

wherein

$HX_1$  is selected from the group consisting of N, Q, D, L, G and E,

$HX_2$  is selected from the group consisting of Y and T,

25  $HX_3$  is selected from the group consisting of V, I, F and L,

HCDR2 is of amino acid sequence which has the formula

30 
$$W I HX_4 HX_5 HX_6 HX_7 G HX_8 T HX_9 Y HX_{10} HX_{11} HX_{12} F HX_{13} HX_{14}$$

wherein

$HX_4$  is selected from the group consisting of S, D, N, A,

R, G and E,

HX<sub>5</sub> is selected from the group consisting of A, D, G, T,  
P, N and Y,

HX<sub>6</sub> is selected from the group consisting of N, D, L, A,  
5 P, T, S, I and R,

HX<sub>7</sub> is selected from the group consisting of N, S, T, D,  
G, K and I,

HX<sub>8</sub> is selected from the group consisting of D, T, E, Q,  
L, Y, N, V, A, M and G,

10 HX<sub>9</sub> is selected from the group consisting of N, I, L, Q,  
S, M, H, D and K,

HX<sub>10</sub> is selected from the group consisting of G and R,

HX<sub>11</sub> is selected from the group consisting of Q and R,

HX<sub>12</sub> is selected from the group consisting of E, K and G,

15 HX<sub>13</sub> is selected from the group consisting of Q and R,

HX<sub>14</sub> is selected from the group consisting of G and K,

HCDR3 is of amino acid sequence which has the formula

20 D HX<sub>15</sub> HX<sub>16</sub> HX<sub>17</sub> HX<sub>18</sub> W A R W HX<sub>19</sub> F HX<sub>20</sub> L

wherein

HX<sub>15</sub> is selected from the group consisting of S, R and D,

25 HX<sub>16</sub> is selected from the group consisting of S, N, D, T  
and P,

HX<sub>17</sub> is selected from the group consisting of S and R,

HX<sub>18</sub> is selected from the group consisting of S, N, A, I,  
R, P and K,

30 HX<sub>19</sub> is selected from the group consisting of F and Y,

HX<sub>20</sub> is selected from the group consisting of D and Y,

LCDR1 is of amino acid sequence which has the formula

G G LX<sub>1</sub> LX<sub>2</sub> LX<sub>3</sub> G LX<sub>4</sub> LX<sub>5</sub> L V H

wherein

5

LX<sub>1</sub> is selected from the group consisting of N, D and S,  
LX<sub>2</sub> is selected from the group consisting of N, I, L, M,  
C, V, K, Y, F, R, T, S, A, H and G,

10

LX<sub>3</sub> is selected from the group consisting of I and V,  
LX<sub>4</sub> is selected from the group consisting of S and G,  
LX<sub>5</sub> is selected from the group consisting of K and R,  
LCDR2 is of amino acid sequence which has the formula

D D G D R P LX<sub>6</sub>

15

wherein

LX<sub>6</sub> is selected from the group consisting of S and T,

LCDR3 is of amino acid sequence which has the formula

20

Q V W D T G S LX<sub>7</sub> P V LX<sub>8</sub>

wherein

LX<sub>7</sub> is selected from the group consisting of D and N,

25

LX<sub>8</sub> is selected from the group consisting of V and I.

63. An isolated specific binding member according to claim 62,  
wherein

30

HX<sub>1</sub> is selected from the group consisting of D and N,  
HX<sub>2</sub> is Y,  
HX<sub>3</sub> is L,



HX<sub>4</sub> is selected from the group consisting of S and G,  
HX<sub>5</sub> is selected from the group consisting of T and A,  
HX<sub>6</sub> is N,  
HX<sub>7</sub> is selected from the group consisting of N and I,  
5 HX<sub>8</sub> is D,  
HX<sub>9</sub> is selected from the group consisting of N, D and K,  
HX<sub>10</sub> is G,  
HX<sub>12</sub> is selected from the group consisting of E and G,  
HX<sub>13</sub> is Q,  
10 HX<sub>19</sub> is F,

LX<sub>1</sub> is selected from the group consisting of N and S,  
LX<sub>2</sub> is selected from the group consisting of N, Y, T, S,  
and I,  
15 LX<sub>6</sub> is S,  
LX<sub>7</sub> is D.

64. An isolated specific binding member according to claim  
62, wherein

20 HX<sub>1</sub> is selected from the group consisting of N and D,  
HX<sub>2</sub> is Y,  
HX<sub>3</sub> is L,  
HX<sub>4</sub> is selected from the group consisting of S and G,  
25 HX<sub>5</sub> is selected from the group consisting of A and T,  
HX<sub>6</sub> is N,  
HX<sub>7</sub> is N,  
HX<sub>8</sub> is selected from the group consisting of D and G,  
HX<sub>9</sub> is selected from the group consisting of I, S, N and  
30 D,  
HX<sub>11</sub> is Q,  
HX<sub>12</sub> is E and K,

HX<sub>14</sub> is G,

HX<sub>15</sub> is S,

HX<sub>16</sub> is selected from the group consisting of S and N,

HX<sub>17</sub> is S,

5 HX<sub>18</sub> is selected from the group consisting of S and N,

HX<sub>19</sub> is F,

HX<sub>20</sub> is D,

LX<sub>1</sub> is selected from the group consisting of N and D,

10 LX<sub>3</sub> is I,

LX<sub>8</sub> is V.

65. An isolated specific binding member according to claim  
62, wherein

15

HX<sub>7</sub> is selected from the group consisting of N, S, T, D, G  
and K,

HX<sub>8</sub> is selected from the group consisting of D, T, E, Q,  
L, Y, N, V, A, M,

20 HX<sub>9</sub> is selected from the group consisting of N, I, L, Q,  
S, M and H,

HX<sub>10</sub> is G,

HX<sub>11</sub> is Q,

HX<sub>12</sub> is F,

25 HX<sub>13</sub> is Q,

HX<sub>14</sub> is G,

HX<sub>15</sub> is S,

HX<sub>16</sub> is selected from the group consisting of N and S,

HX<sub>17</sub> is S,

30 HX<sub>18</sub> is selected from the group consisting of N and S,

HX<sub>19</sub> is F,

HX<sub>20</sub> is D,

LX<sub>1</sub> is N,

LX<sub>2</sub> is selected from the group consisting of N and I,

LX<sub>3</sub> is I,

5 LX<sub>4</sub> is S,

LX<sub>5</sub> is K,

LX<sub>6</sub> is S,

LX<sub>7</sub> is D,

LX<sub>8</sub> is V.

10

66. An isolated specific binding member according to claim 65, wherein

HX<sub>1</sub> is selected from the group consisting of N, Q and D,

15 HX<sub>3</sub> is selected from the group consisting of L, V and I,

HX<sub>4</sub> is selected from the group consisting of S, N, A and R,

HX<sub>5</sub> is selected from the group consisting of A, D, T, G, N and Y,

20 HX<sub>6</sub> is selected from the group consisting of N, A, P, S, D and I,

HX<sub>7</sub> is selected from the group consisting of N, T, D and G,

25 HX<sub>8</sub> is selected from the group consisting of D, Q, Y and N,

HX<sub>9</sub> is selected from the group consisting of N, Q, S and I.

67. A specific binding member according to any one of claims 30 62 to 66 that neutralizes human IL-13.

68. A specific binding member according to claim 67 that neutralizes human IL-13, with a potency equal to or better than the potency of a IL-13 antigen-binding site formed by the BAK502G9 VH domain (SEQ ID NO: 15) and the BAK502G9 VL domain (SEQ ID NO: 16), the potency of the specific binding member and the potency of the antigen-binding site being as determined under the same conditions.
69. A specific binding member according to any one of claims 62 to 68 that comprises an scFv antibody molecule.
70. A specific binding member according to any one of claims 62 to 68 that comprises an antibody constant region.
71. A specific binding member according to claim 70 that comprises a whole antibody.
72. A specific binding member according to claim 71 wherein the whole antibody is IgG4.
73. An isolated specific binding member according to any one of claims 62 to 72 which binds a human IL-13 variant in which arginine at position 130 is replaced by glutamine.
74. An isolated specific binding member according to any one of claims 62 to 72 which binds non-human primate IL-13.
75. An isolated specific binding member according to claim 74 wherein the non-human primate IL-13 is rhesus or cynomolgus.
76. An isolated antibody VH domain of a specific binding member according to any one of claims 62 to 75.

77. An isolated antibody VL domain of a specific binding member according to any one of claims 62 to 75.

5 78. A composition comprising the specific binding member, antibody VH domain or antibody VL domain of any one of claims 62 to 77 and at least one additional component.

79. A composition according to claim 78 comprising a  
10 pharmaceutically acceptable excipient, vehicle or carrier.

80. An isolated nucleic acid which comprises a nucleotide sequence encoding a specific binding member or antibody VH or VL domain of a specific binding member according to any one of  
15 claims 62 to 77.

81. A host cell *in vitro* transformed with nucleic acid according to claim 80.

20 82. A method of producing a specific binding member or antibody VH or VL domain, the method comprising culturing host cells according to claim 81 under conditions for production of said specific binding member or antibody VH or VL domain..

25 83. A method according to claim 82 further comprising isolating and/or purifying said specific binding member or antibody VH or VL variable domain.

30 84. A method according to claim 82 or claim 83 further comprising formulating the specific binding member or antibody VH or VL variable domain into a composition including at least one additional component.

85. A method according to any one of claims 82 to 84 further comprising binding a specific binding member that binds human IL-13 to IL-13 or a fragment of IL-13.

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86. A method comprising binding a specific binding member that binds IL-13 according to any one of claims 62 to 75 to human IL-13 or a fragment of human IL-13.

10 87. A method according to claim 85 or claim 86 wherein said binding takes place *in vitro*.

88. A method according to any one of claims 85 to 87 comprising determining the amount of binding of specific  
15 binding member to IL-13 or a fragment of IL-13.

89. A method according to any one of claims 82 to 84 further comprising use of the specific binding member in the manufacture of a medicament for treatment of a disease or  
20 disorder selected from the group consisting of asthma, atopic dermatitis, allergic rhinitis, fibrosis, inflammatory bowel disease and Hodgkin's lymphoma.

90. Use of a specific binding member according to any one of  
25 claims 62 to 75 in the manufacture of a medicament for treatment of a disease or disorder selected from the group consisting of asthma, atopic dermatitis, allergic rhinitis, fibrosis, inflammatory bowel disease and Hodgkin's lymphoma.

30 91. A method of treatment of a disease or disorder selected from the group consisting of asthma, atopic dermatitis, allergic rhinitis, fibrosis and Hodgkin's lymphoma, the method

comprising administering a specific binding member according to any one of claims 62 to 75 to a patient with the disease or disorder or at risk of developing the disease or disorder.